Claim Amendments, 4 May 2001

1. (Amended) A membrane [Membrane] vesicle [, characterised in that it] that comprises a recombinant molecule of the human major Histocompatibility complex.

2. (Amended) The vesicle [Vesicle] according to claim 1, [characterised in that the] in which said recombinant molecule of the major Histocompatibility complex is a class II molecule.

3. (Amended) The vesicle [Vesicle] according to claim 2, [characterised in that the] in which said recombinant class II molecule of the major Histocompatibility complex is an α chain.

4. (Amended) The vesicle [Vesicle] according to claim 2, [characterised in that the] in which said recombinant class II molecule of the major Histocompatibility complex comprises an α chain and a β chain.

5. (Amended) The vesicle [Vesicle] according to [any of] claims 2 [to] , 3 or 4, [characterised in that the] in which said recombinant class II molecule of the major Histocompatibility complex is chosen from among the serotypes DR1 [to] , DR2, DR3, DR4, DR5, DR6, DR7, DR8, DR9, DR10, DR11, DR12 and DR13 [, preferably from DR1 to DR7].

6. (Amended) The vesicle [Vesicle] according to claim 1, [characterised in that the] in which said recombinant molecule of the major Histocompatibility complex is a class I molecule.

7. (Amended) The vesicle [Vesicle] according to [any of claims 1 to 6, characterised in that it contains] claim 1, further comprising a complex between a defined peptide and [the] said recombinant molecule of the major Histocompatibility complex.

8. (Amended) The vesicle [Vesicle] according to [any of the preceding claims, characterised in that it also contains] claim 1, which further comprises one or more heterologous molecules of interest.

9. (Amended) The vesicle [Vesicle] according to [any of the preceding claims, characterised in that it also contains] claim 1, which further comprises a peptide or a recombinant protein enabling its purification.

10. (Amended) The vesicle [Vesicle] according to [the preceding claims, characterised in that it] claim 1, which further comprises a tracer.

11. (Amended) The vesicle [Vesicle] according to [any of the preceding claims, characterised in that it] claim 1, which is essentially free of molecules of the endogenous MHC.

12. (Amended) A membrane [Membrane] vesicle [characterised in that it] that is obtained from a mastocyte or mastocyte derived cell, [and in that it contains] comprising one or more heterologous molecules of interest.

13. (Amended) The vesicle [Vesicle] according to claim 12, [characterised in that the] in which said heterologous molecule of interest is a protein, a polypeptide, a peptide, a nucleic acid, a lipid, or a substance of chemical, biological or synthetic nature.

14. (Amended) The membrane [Membrane] vesicle according to claim [13] 12, [characterised in that the] in which said heterologous molecule is one or more molecules selected from the group consisting of a molecule of the major Histocompatibility complex, an antigen, a receptor ligand, a ligand receptor, a nucleic acid, a pharmacological product, a tracer [and/] , or a purification peptide.

15. (Amended) The vesicle [Vesicle] according to claim 14, [characterised in that it expresses] in which said heterologous molecule is a ligand receptor, and [in that it contains] which further comprises another heterologous molecule of interest.

16. (Amended) A membrane [Membrane] vesicle [, characterised in that it contains] that comprises a recombinant fusion molecule between a polypeptide of interest and [an addressing signal] a signal sequence.

17. (Amended) An exosome- [Exosome-] producing cell, [characterised in that it contains] comprising one or more recombinant nucleic acids coding for a molecule of the major Histocompatibility complex.

18. (Amended) The cell [Cell] according to claim 17, [characteried in that it] in which said cell is a mastocyte cell.

19. (Amended) The cell [Cell] according to claim 18, [characterised in that it is] in which said mastocyte cell is derived from a mastocyte line of a basophilic leukemia [, in particular of the RBL line, preferably RBL-2H3].

20. (Amended) The cell [Cell] according to [claims 17 to 19 , characterised in that it comprises a] claim 17, in which said molecule is one or more of an MHC class I molecule, or an MHC class II α or β chain molecule [recombinant nucleic acid coding for an α chain and/or a β chain of a class II molecule of the major Histocompatibility complex and/or for a class I molecule of the major Histocompatibility complex].

21. (Amended) A method [Method] for producing an exosome containing a defined recombinant molecule, comprising [the following] steps of:

[a) culture of] culturing a mastocyte or mastocyte-derived cell containing a recombinant nucleic acid coding for said defined recombinant molecule[,] ; and

[c) recovery of] recovering the exosomes produced by said cells, these exosomes containing said defined recombinant molecule.

22. (Amended) The method [Method] according to claim 21, [characterised in that it comprises an intermediate step b) during which the cells are stimulated] further comprising the step of stimulating said cells to induce [and/] or increase, or both, the secretion of exosomes.

23. (Amended) The method [Method] according to claim 21 [or 22, characterised in that the] , in which said defined recombinant molecule is exposed outside the exosome, or is included, wholly or in part, in the cytosolic fraction of the exosome.

24. (Amended) The method [Method] according to [any of claims 21 to 23, characterised in that the] claim 21, in which said recombinant molecule is a molecule of the major Histocompatibility complex, an antigenic molecule, a receptor ligand, a ligand receptor, a purification peptide, or any other polypeptide of interest.

25. (Amended) The method [Method] according to [any of claims 21 to 24, characterised in that the] claim 21, in which said nucleic acid also comprises a region [coding for an addressing signal towards the membrane compartments of the mastocyte] encoding a membrane-specific signal sequence.

26. (Amended) A method [Method] for preparing an exosome containing a peptide-MHC complex of defined composition, [characterised in that it comprises] comprising the steps of:

[- culture of] culturing an exosome-producing cell containing one or more recombinant nucleic acids coding for a defined recombinant molecule of the MHC[,];

[- stimulation of the] stimulating said cells to induce release of the exosomes[,];

[- recovery of the] recovering said exosomes produced by said cells, these exosomes expressing on their surface said defined recombinant molecule of the MHC[,]; and

[-] placing the exosomes in contact with the peptide or peptides.

27. (Amended) A method [Method] for preparing an exosome containing a peptide-MHC complex of defined composition, [characterised in that it comprises] comprising the steps of:

[- culture of] culturing an exosome-producing cell containing one or more recombinant nucleic acids coding for a defined recombinant molecule of the MHC and a nucleic acid containing a region coding for a defined recombinant peptide[,];

[- stimulation of the] stimulating said cells to induce release of the exosomes; and

[- recovery of the] recovering said exosomes produced by said cells, these exosomes expressing on their surface said defined recombinant molecule of the MHC associated with said recombinant peptide.

28. (Amended) The method [Method] according to claim 27, [characterised in that the] in which said nucleic acid coding for the recombinant peptide codes for a derivative of the Ii invariant chain, in which the CLIP region has been deleted and substituted by said peptide.

29. (Amended) The method [Method] according to [any of claims 26 to 28, characterised in that the] claim 26 or 27, in which said producer cell is a mastocyte or mastocyte-derived cell.

30. (Amended) The method [Method] according to [any of claims 26 to 29, characterised in that the] claim 26 or 27, in which said producer cell is essentially free of molecules of the endogenous MHC.

31. (Amended) A method [Method] for modifying the composition of an exosome, comprising the steps of:

[- insertion] inserting into an exosome-producing cell [of] a nucleic acid coding for a defined molecule, [bound to an addressing signal in the] and a signal sequence targeting cellular membrane compartments[,]; and

[- production of] recovering exosomes from said cell.

32. (Amended) A composition [Composition] containing one or more membrane vesicles according to [any of claims] claim 1 [to] , 12, or 16.

33. (Amended) A method of using the [Use of a] vesicle [according to any of claims] of claim 1 [to] , 12, or 16 for the production of polyclonal [and/or] antibodies or monoclonal antibodies or both.

34. (Amended) A method [Method] for producing antibodies, comprising [immunisation of] immunizing an animal with a vesicle according to claim [7] 1, and [recovery of] recovering the antibodies [and/] or cells producing antibodies or involved in the immunity response, or both.

35. (Amended) The method [Method] according to claim 34 [for the production of] , in which said antibodies are monoclonal antibodies [, in particular specific for the MHC-peptide association].

36. (Amended) A method of using [Use of] an antibody obtained according to claim 34 [or 35], or of a fragment of said antibody, for the detection, in a biological sample, of the presence of corresponding specific antigens.

37. (Amended) A method of using [Use of] an antibody produced according to claim 34 [or 35, of] , or a fragment of said antibody, or of a membrane vesicle [according to claim 1] that comprises a recombinant molecule of the human major Histocompatibility complex for the preparation of a therapeutic composition intended to inhibit the interaction between the receptor of a T-lymphocyte and the MHC-peptide complex for which it is specific.

38. (Amended) A method of using [Use of] a membrane vesicle according to [any of claims 1 to 16] claim 1, 12, or 16 for the detection of partners specific for a protein molecule in a biological sample.

39. (Amended) The method of claim 38, in which said membrane vesicle carries [Use according to claim 38 of an exosome carrying] a MHC-peptide complex for the detection of T-lymphocytes specific to this complex in a biological sample.

40. (Amended) The method of claim 38, in which said membrane vesicle carries [Use according to claim 38 of an exosome carrying] a TcR receptor for the detection of peptide-MHC complexes specific to this receptor in a biological sample.

41. (Amended) The method of claim 38, in which said membrane vesicle carries [Use according to claim 38 of an exosome carrying] a ligand receptor for the detection of the presence of said ligand in a biological sample.

42. (Amended) A method [Method] for the detection of the presence of T-lymphocytes specific to antigen-MHC complexes in a biological sample, comprising placing

said sample in contact with an exosome labelled according to claim [7] 51, containing said antigen-MHC complex, and evidencing the labelling of T-lymphocytes in said sample.

43. (Amended) A method of using the [Use of a] vesicle according to claim 7 for [the] clonal amplification [and/] or *ex vivo* stimulation of T-lymphocytes, or both, wherein said T-lymphocytes are cytotoxic [and/] or auxiliary T-lymphocytes, or both.

44. (Amended) A method of using [Use of] a vesicle according to [any of claims 11 to 16] claim 1, 12, or 16 for the preparation of a composition intended to [vehicle] deliver said molecule [towards] to a cell.

45. (Amended) A composition [Composition] containing one or more exosomes [immobilised] immobilized on a support.

46. (Amended) A method of using [Use of] a membrane vesicle according to [any of claim 1 to 16, in particular in immobilised form] claim 1, 12, or 16, wherein said membrane vesicle is immobilized on a support, for the purification of cells.

47. (New) The vesicle according to claim 5, in which said serotype is selected from the group consisting of DR1, DR2, DR3, DR4, DR5, DR6, and DR7.

48. (New) The method of claim 35, in which said monoclonal antibodies are specific for the MHC-peptide association.

49. (New) The cell of claim 19, in which said cell is derived from an RBL cell line.

50. (New) The cell of claim 49, in which said RBL cell line is RBL-2H3.

51. (New) The complex of claim 7, wherein said defined peptide is an antigen.